

# Goddard Employee Colloquium

Dr. A. Fritz Hasler - Goddard Lab for Atmospheres

## *Electronic-Theater '97*

Tuesday, January 14, 1997/ 1:00 p.m.

Bldg. 3 Auditorium

**Contributors:** D. Chesters, K. Palaniappan, M. Jentoft-Nilsen, B. Summey, H. Mitchell, M. Manyin, J. de La Beaujardière, A. Nelson, H. Pierce.

The presentation will feature Goddard's Interactive Image SpreadSheet (IISS), on the new **SGI multi-processor Onyx Infinite-Reality** and **Indigo2 High Impact** workstations: Live on the Internet on **3 video screens**. Specs: 800 Gflop, 1.0 GB RAM, 32 GB striped mass store.

**The 96 hurricane season:** Another big hurricane season is illustrated, showing how North Carolina got the one two punch of Bertha and Fran, as well as other storms which devastated the US coasts, Mexico & Caribbean with winds up to 150 mph, torrential rains, storm surge & giant surf. Watching overhead again were two of a **new generation of weather satellites**, NOAA GOES 8 & 9, developed by NASA. The swirling eye of Luis is seen simultaneously on one minute interval GOES-9 images & hurricane hunter aircraft Doppler radar. See first VLF lightning data overlaid on 15 min interval GOES-9 images.

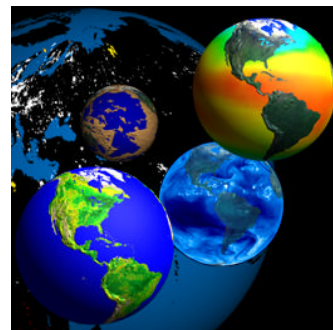
An enhanced version of the IISS will be shown for visualizing and intercomparing 3-D EOS gridded data from the Data Assimilation Office. The IISS has been used on the air by **NBC 4's Dave Jones**, **ABC's Peter Jennings**, **NBC's Tom Brokaw**, **CBC**, **CNN**, **Weath. Channel**, etc. See 3D perspective image of hurricane Fran featured in **Time Magazine**, the top ~10 "BIG PICTURES" of "96 **Life Magazine** & **Encyclopedia Britannica**.

See the video concept for a Geosynchronous Advanced Technology Environmental Syst. (GATES), a small, agile satellite Imager prototype.

See the images and animations developed for the **Smithsonian Institution's Museum of Natural History 150th Anniversary HoloGlobe Exhibit** with the National Air & Space Museum, NOAA, NSF & DARPA opened Aug 2 by V. President Al Gore. The HoloGlobe is a revolutionary holograph-like display of a 4' real image of the earth which appears to float in front of the audience. The HoloGlobe projects rendered global climate data in a manner which astonishes viewers.

See stereo obs. from GOES 8 & 9 from 22,500 miles high in geo orbit. Red/green glasses will give you vivid 3-D perception. Also see GSFC's **GLOBE Web pages done for the White House**. Sample Web pages of the Public Use of Remote Sensing Data program and see fluid polar ice caps in motion revealed in stunning detail by SSM/I.

**Fritz Hasler:** Code 912, Ph.D./Meteorology, U of WI, & U. of Munich, at GSFC, since 1974 after NCAR & Laboratoire de Meteorologie Dynamique in Paris. Current research involves automatic estimation of winds & stereo height and hurricane Luis study. Dr. Hasler manages the RSD, IISS & GLOBE Vis.(w code 935) projects & has written 48 scientific papers  
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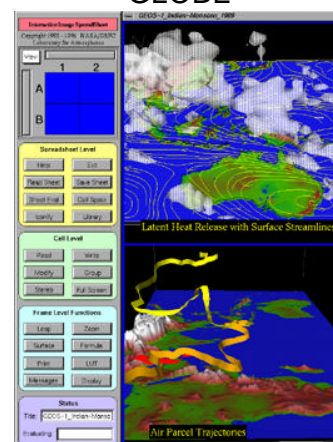
Smithsonian HoloGlobe



Hurricane Fran Sept 4, '96



GLOBE



IISS - Vis5D - DAO

